

REMARKS

Claims 1, 3-10 and 12-16¹ are pending. Claims 1, 7, 10, 15, and 16 are currently amended to affirmatively claim “a unimodal fluoropolymer...” Support for these amendments can be found, for example, in the Materials Used table listed on page 8 and Examples 1-6 of the application as originally filed, which show that the polymer processing additive (PPA) in Examples 1-6 comprise either DyneonTM PVDF 11012 or DyneonTM PVDF 31508, and poly(oxyalkylene) polymer. As stated in the Affidavit filed under 37 CFR § 1.132 submitted herewith, DyneonTM PVDF 11012 and DyneonTM PVDF 31508 are both unimodal fluoropolymers. See Affd., ¶11. Claim 7 also is amended to recite “at a lower level of said fluoropolymer processing aid when compared to a standard processing aid system”. Support for this amendment can be found, for example, at page 6, lines 14-15 in the application as originally filed. Claim 16 is amended to correct a typographical error. No new matter has been added to the specification. Reconsideration of the application and entry of the enclosed amendment are respectfully requested.

§ 103 Rejections

Claims 1, 3-10, and 12-16 are rejected under 35 USC § 103(a) as being unpatentable over US 6,277,919 Dillon et al. (the ‘919 patent). The Office Action states “each of the claimed ingredients is discussed and suggested to be used in combination with one another” in the ‘919 patent. Applicants respectfully traverse the rejection.

Applicants have amended independent claims 1, 7, 10, and 15. Claims 1, 7, 10, and 15 have substantially similar limitations to “a fluoropolymer processing aid having (i) a poly(oxyalkylene) polymer; and (ii) a unimodal fluoropolymer having interpolymers of vinylidene fluoride [VDF] and at least one other monomer wherein the vinylidene fluoride content of the fluoropolymer is greater than 75% by weight...”. Applicants’ response particularly addresses claim 1. Because independent claims 7, 10, and 15 include the above referenced limitation, the argument below pertains to all of the independent claims.

¹ Applicants note that in the Office Action dated June 18, 2007, the Office Action Summary page states claims 1, 3-10 and 12-18 are pending and rejected, while page 2 of the Office Action ¶3 states claims 1, 3-10 and 12-16 are rejected. Applicants believe the rejected claim numbers cited on page 2 of the Office Action are correct.

Applicants have amended claims 1, 7, 10, and 15 to include, *inter alia*, “a unimodal fluoropolymer.” The ‘919 patent teaches away from a unimodal fluoropolymer, for example, “[t]he present invention provides a polymer processing additive composition based on a **multimodal** fluoropolymer. As used herein, the term multimodal means that the fluoropolymer has **at least two components** of discrete and **different molecular weights**.” See ‘919 patent, col. 3, lines 11-15, emphasis added. Comparison of the results shown in column 11 of the ‘919 patent “shows that when unimodal fluoroplastics are used as polymer processing additive, they do not perform as well as similar multimodal fluoroplastics.” See ‘919 patent, col. 11, lines 34-36. Further, in “FIG. 1, only the multimodal fluoropolymer-based additive composition cleared melt fracture...after only 60 minutes of extrusion. Even after 120 minutes of processing, none of the unimodal fluoropolymers had cleared the melt fracture.” See ‘919 patent, col. 11, lines 56-60.

In contrast, in the present application when a melt processable composition comprises a unimodal fluoropolymer and poly(oxyalkylene) polymer, the melt processable composition upon extrusion achieves an extrudate exhibiting no melt defects at a lower level of the fluoropolymer processing aid when compared to a standard processing aid system. For example, more than 1600 ppm of polymer processing aid is required to clear melt fracture when Dyneon™ PVDF 31508 was used as a processing additive versus 1200 ppm when Dyneon™ PVDF 31508 and poly(oxyalkylene) polymer was used as a processing additive. See Applicants’ specification, Table 3, Comparative Example 9, and Example 6.

Thus, the ‘919 patent does not describe, teach or suggest a fluoropolymer processing aid as recited in amended claims 1, 7, 10, and 15, and the rejection should be withdrawn.

Based on the foregoing, Applicants respectfully submit that claims 1, 7, 10, and 15 are allowable over the cited art. Because claims 3-6, 8-9, 12-14, and 16 depend directly or indirectly from now allowable base claims 1, 7, 10 or 15, Applicants submit that these dependent claims are in condition for allowance.

In view of the foregoing, Applicants submit that the present application is in condition for allowance. Reconsideration and allowance of the pending claims at an early date is solicited. If issues remain, the Examiner is invited to contact the Applicants' attorney at the telephone number provided below.

Respectfully submitted,

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